

REMARKS

Applicant would like to thank the Examiner for the careful consideration the Examiner has given the present application. The undersigned attorney has taken over prosecution of the present application and will provide the Examiner with a copy of a new power of attorney and change of correspondence address in a subsequent communication.

Claims 1- 38 are currently pending in the present application, with claims 14-25 having been withdrawn from consideration. In this Amendment, Applicant has amended the specification and the claims. More specifically, Applicant has amended the second paragraph of the BACKGROUND OF THE INVENTION to more clearly describe the prior art power conversion system shown in Fig. 1 and has amended the fourth paragraph of the DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS to more clearly describe the power conversion system of the present invention shown in Fig. 4. In addition, Applicant has amended claims 1, 3, 11, 12 and 26, has canceled claims 2 and 14-25 and added new claims 39-41. Reconsideration of the application in its current format is hereby requested.

In the Office action, the Examiner has rejected claims 11, 12 and 28 under 35 U.S.C. §112, second paragraph, as being indefinite because in claims 11 and 12, there is no antecedent basis for "power conditioner" and in claim 28, it is unclear whether or not the "internal auxiliary load" is the same or different than the "internal auxiliary load" set forth in claim 26. In response to the rejection, Applicant has amended claim 11 to recite a "power conditioner" and has amended claim 12 to be dependent from claim 11. With regard to claim 28, Applicant has amended claim 26 to remove the recitation concerning the "internal auxiliary load", thereby removing

the confusion with regard to claim 28. Applicant further submits that amended claims 11, 12 and 28 meet the requirements of 35 U.S.C. §112, second paragraph.

In the Office action, the Examiner has rejected claims 1, 4-10, 13, 26, 29-35, 38 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,630,259 to Fuglevand. In addition, the Examiner has rejected claims 1, 3-7, 11 and 12 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,559,621 to Corless et al. The Examiner objected, inter alia, to claim 2 and stated in an interview with Applicant's prior representative, Vince Roccia, that claim 2 would be allowable if rewritten in independent format including all the limitations of the base claim (claim 1) and any intervening claims (none). Since Applicant has amended claim 1 to include the limitations of claim 2, Applicant submits that claim 1 is allowable and notice to that effect is hereby requested. Applicant submits that claims 3-13 are also allowable since they depend from amended claim 1 and recite additional novel features of the present invention.

With regard to independent claim 26 and claims 27-41, which depend therefrom, Applicant has amended independent claim 26 to remove the recitation of the "internal auxiliary load" and has added recitations concerning the operation of the "controller" and the connection of the "switch". Applicant submits that the power conversion system recited in amended claim 26 is not shown or suggested in either the Fuglevand patent or the Corless et al. patent, as will be shown in the paragraphs below.

The Fuglevand patent discloses a fuel cell power system 10 having control circuitry 34 and fuel cell modules 12 with fuel cells 16. The operation of the control circuitry 34 is primarily described in columns 8 and 9. With regard to the control of power, Fuglevand states:

"The controller 34 measures the individual voltages of the modules 12, 13 and electrically switches in the respective fuel cells 16 to the respective ultracapacitors 14, when appropriate, for each module." (column 8, lines 27-31).

"The circuit design shown in FIGS. 1 and 2 allows real-time compensation of voltage by switching in and out various modules 12a-i, using the controller 34 and switching circuitry 62. Using the multiple taps and multiple modules 12a-i, the voltage can be regulated to within the voltage of a single module (e.g., 2 Volts). Furthermore, if one or more modules fail or if the output voltage declines, the controller 34 will, in one embodiment, automatically maintain the voltage by switching in other modules." (column 9, lines 42-51)

From the foregoing, it is clear that the controller 34 of the Fuglevand patent controls the power from the fuel cell system 10 by switching in and out the modules 12 and the individual fuel cells 16 and not by controlling the operating parameters of the fuel cells 16. Thus, the Fuglevand patent fails to show or suggest (with emphasis added): a "controller", wherein "in response to changes in the external load, *the fuel cell's operating parameters are controlled to control the output power provided from the fuel cell* to the external load", as is presently recited in amended independent claim 26. For at least this reason, the Fuglevand patent fails to show or suggest independent claim 26 and, thus, dependent claims 27-41.

The Corless et al. patent discloses a hybrid power supply device 10 having a fuel cell 12 and a controller 30. With regard to the operation of the controller 30, the Corless et al. patent states:

"A computer controller 30 which receives input from various sensors, including voltage and current sensors 32, controls charging of primary and secondary storage devices 14, 16 as discussed further below. Controller 30 may also control the operation of fan blowers 34 which circulate air through device 10 to maintain the operating temperature of the various system components within preferred temperature ranges and supply reactants to the fuel cell 12 and reformer 24." (column 5, lines 45-53)

From the foregoing, it appears that the controller 30 of the Corless et al. patent controls operating parameters of the fuel cell 12, however, the Corless et al. patent

is silent as to *how* the controller 30 of the Corless et al. patent controls the operating parameters of the fuel cell 12. More specifically, the Corless et al. patent does not disclose controlling the operating parameters of the fuel cell 12 based on changes in the external load. Thus, the Corless et al. patent fails to show or suggest (with emphasis added): a "controller", wherein "*in response to changes in the external load*, the fuel cell's operating parameters are controlled to control the output power provided from the fuel cell to the external load", as is presently recited in amended independent claim 26. For at least this reason, the Corless et al. patent fails to show or suggest independent claim 26 and, thus, dependent claims 27-41.

In addition to not showing the "controller" as recited in claim 26, the Corless et al. patent also fails to show or suggest a "switch" coupled to a "fuel cell" in the manner recited in amended independent claim 26. The Corless et al. patent discloses a switch 42 that controls the provision of power from a bus 20 to a storage device 14, wherein the bus 20 is connected to a power generating device 11. The bus 20, however, is not directly connected to the power generating device 11. Rather, the bus 20 is connected to the power generating device 11 through a DC to DC converter 22. Thus, the Corless et al. patent fails to show or suggest (with emphasis added): "a switch *directly* coupled to an output of the fuel cell", "wherein the switch is controlled to control the power provided from the fuel cell to the energy storage device", as is presently recited in amended independent claim 26. For at least this additional reason, the Corless et al. patent fails to show or suggest independent claim 26 and, thus, dependent claims 27-41.

For at least the foregoing reasons, Applicant submits that both the Fuglevand patent and the Corless et al. patent fail to show or suggest claims 26-41. Therefore, it is respectfully submitted that the present application is in a condition for allowance

and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 050877.

Respectfully submitted,

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